

AMENDMENTS TO THE CLAIMS

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A compound having the general formula (I)
 $M_5(AO_4)_3X$,
wherein
M represents Ba, Sr, Ca or a mixture thereof;
A represents P, V or a mixture thereof; and
wherein the group $M_5(AO_4)_3$ forms an apatite structure and X is situated in the hexagonal channels of the apatite structure and includes Cu-atoms, with the proviso that the compound is not $Sr_5(VO_4)_3(CuO)$, $Sr_5(VO_4)_3(Cu_{0.894}O_{0.952})$, or $(Sr_{0.9}Ca_{0.1})_5(Cr^V O_4)_3(CuO)$.
2. (Cancelled)
3. (Currently Amended) The compound of claim 1, wherein X further represents a mixture including ~~of~~ Cu^{2+} , Cu^+ , O^{2-} , OH^- , F^- , Cl^- , Br^- ~~and/or~~ or I^- .
4. (Original) The compound of claim 1, wherein X comprises copper ions.
5. (Previously Presented) The compound according to claim 1, wherein X comprises Cu^{2+} .
6. (Previously Presented) The compound according to claim 1, wherein linear units O-Cu-O are present in the hexagonal channels of the apatite structure.
7. (Previously Presented) The compound according to claim 1, wherein X represents $Cu_xO_yH_z$, wherein $0 < x \leq 0.85$, $0 \leq z < 1$ and $0.5 < y \leq 1$.
8. (Previously Presented) The compound according to claim 7, wherein $0.1 \leq x \leq 0.6$.
9. (Previously Presented) The compound according to claim 1, wherein A represents P.

10. (Previously Presented) A process for preparing a compound according to claim 1 comprising the steps:
 - (i) mixing of compounds comprising the elements M, A and X,
 - (ii) thermal treatment of the mixture in the range of 200 to 1700°C to yield a compound of the general formula (I).
11. (Original) The process according to claim 10, wherein the thermal treatment is performed for 0.01 to 60 hours.
12. (Previously Presented) The process according to claim 10, wherein the thermal treatment is performed when intermediate regrinding.
13. (Previously Presented) The process according to claim 10, wherein the thermal treatment of the mixture is performed in air, argon or oxygen.
14. (Previously Presented) The process according to claim 10, further comprising the step
 - (iii) thermal treatment of the compound obtained in step (ii) in oxygen, inert gas atmosphere or vacuum at 500 to 900°C for 0.5 to 24 hours.
15. (Previously Presented) The process for preparing a compound of claim 1 comprising the steps
 - (i) mixing of carbonates of M, $(\text{NH}_4)\text{H}_2\text{PO}_4$ and Cu-compounds,
 - (ii) thermal treatment of this mixture in solid state in air at 600 to 850°C for 1 to 5 hours,
 - (iii) regrinding,
 - (iv) thermal treatment at 1100 to 1400°C for about 1 to 24 hours,
 - (v) cooling and
 - (vi) regrinding.
16. (Previously Presented) Pigment comprising a compound of claim 1.

17. (Currently Amended) Pigment according to claim ~~15~~ 16, wherein X in the compound of general formula (I) comprises Cu^{2+} .
18. (Currently Amended) A method of use ~~Use~~ of a compound according to claim 1 comprising using said compound as pigment, paint or as coloring additive in cements or plasters.
19. (Currently Amended) Pigment comprising a compound prepared by a process according to ~~of~~ claim 10.
20. (Currently Amended) Pigment comprising a compound prepared by a process according to ~~of~~ claim 15.